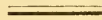


and gray bird in the same nest at Estero Bay in 1881, and the bird procured last March, on Kissimmee Lake, with the white occipital plume. This would seem to be insufficient.

Mr. Cannon, a bird collector for many years on the Atlantic and Gulf coasts, coincides in the opinion that the white and gray birds are different species, stating that he has visited heronries composed entirely of *A. occidentalis*—not a single gray bird among them; and that he has yet to find a single instance where a white and gray bird have mated. Better evidence is needed to settle this question than is now at command.



NOTES ON *PHALACROCORAX VIOLACEUS*. AND ON *P. VIOLACEUS RESPLENDENS*.

BY N. S. GOSS.

THE Violet-green Cormorants are quite common along the Northwest Coast, but not easily captured, as they rarely alight upon the main land, even where the coast is high and precipitous, preferring the rocks and reefs off the shore which are more or less submerged at high tide. These form their natural fishing grounds and resting places and to which they return at night. They nest upon the sides of the higher rocks and inaccessible cliffs that in places form the frontage of the islands.

At Neah Bay and vicinity, Washington Territory, I had a very good opportunity to observe the birds from the 10th of January to the 6th of June, 1882. The following are the measurements, etc., as taken at the time of killing, of seven of the birds (four of which are in my collection):—

Locality.	Date.	Sex.	Length.	Stretch.	Wing.	Tail.	Tars.	Bill.	Weight.
Neah Bay,	Jan. 31.	♀	25.50	39.25	9.40	5.80	1.70	1.70	2lb. 14oz.
Neah Bay,	Feb. 13.	♀	25.75	39.10	9.30	6.00	1.70	1.80	3lb.
Neah Bay,	Feb. 16. juv.	♂	27.50	41.00	9.65	6.20	1.75	1.85	3lb. 5oz.
C. Flattery.	Feb. 19.	♂	28.50	42.50	10.00	6.50	1.80	1.95	3lb. 13oz.
Neah Bay,	May 13.	♂	29.00	43.50	10.50	6.70	1.80	1.95	3lb. 15oz.
Neah Bay,	May 13.	♀	25.75	39.35	9.40	6.00	1.70	1.85	2lb. 14oz.
Neah Bay,	June 4, juv.	♀	25.50	39.20	9.40	5.80	1.70	1.80	2lb. 14oz.

Iris of adults, green; of juveniles, brown. Bill dusky with an olive tint; in birds shot May 13, grayish on sides. Lores, bare space around eyes and gular sac dark purple-brown, dotted over with deep red papillæ. Legs, feet, webs, and claws black.

I notice that in all the descriptions of the birds that I have read the bare space around the eyes and gular sac are given as orange. This must be incorrect, as none of the many I shot were even tinged with this color, but were throughout of rather a deep reddish-brown or grape-juice color. I am inclined to think writers have followed Aububon, who gives the color as orange from a dried specimen sent to him by Mr. Townsend; and as the bill, legs, feet, and all bare spaces change rapidly to a darker color after death, it would be impossible to determine with any certainty from dried skins the true color in life.

The sexes are alike in color, the female being fully as lustrous as the male, the only difference in outward appearance being the smaller size of the female. Except during the breeding season, the birds are without the coronal and occipital crests and the white flank-patches. About the middle of February a few scattering white feathers begin to appear upon the flanks, and by the middle of May these patches are wholly white, and the two lateral crests on the head are full and complete. The short, white, *hair*-like feathers irregularly and sparingly scattered over the neck, and occasionally upon the back, I found about the same in all the adults, but I am inclined to think that they also belong to the breeding plumage and are not present in autumn. The young birds are rusty brown, and as many were of this color when I left (June 6), the birds must be two years at least in acquiring the adult plumage.

May 15, at Tatoash Isle (an islet close to Cape Flattery, just outside of the mouth of the Strait of Fuca), I found a few of these birds nesting up the south side of the high perpendicular cliffs. The nests were made of seaweed but were not bulky. On the top of the island were places where I could look down upon the birds, which I frightened away by dropping pieces of sod torn from the bank. Several nests were without eggs; others had one or two. It was my intention to return later, and also visit the 'Flattery Rocks,' where they nest in numbers, for the purpose of securing full sets of their eggs (three to four, white with a bluish-green tint); but an opportunity to cruise in a schooner that was to take Indians and their canoes to catch the fur seals was too tempting to be resisted, and on my return business engagements called me home.

P.S.—Since writing the above I have received and read Dr. J. G. Cooper's paper 'On a new Cormorant from the Farallone Islands, California.*' This is the *Graculus bairdi* Gruber, MSS., which Mr. Ridgway refers to *P. violaceus resplendens*. From the description given in the above-cited paper I might be led to think that the birds I have described must be Baird's Cormorant instead of the Violet-green, did not Dr. Cooper speak of the variety found on the coast of California as differing from the birds of the Oregon and Washington coasts in having, among other things, "conspicuous white patches on the flanks." But the birds of the Washington coast and vicinity have, as stated above, the white flank-patches, and also the color and markings given by Dr. Cooper for the more southern bird. The only difference (so far as I can judge) is the alleged smaller size of the so-called southern variety. But Dr. Cooper's measurements do not show this difference; and as Dr. G. Suckley, in his report on water birds in 'Explorations and Surveys for the Pacific Railroad' (Vol. XII, pt. 2, p. 268), gives the color of the female as brown, is it not possible that Mr. Gruber and others referred to by Dr. Cooper were of the same opinion, and that notes and measurements of specimens sent the Smithsonian Institution have not been from specimens sexually determined by dissection? If so the difference in size would be accounted for. But be this as it may, further investigation appears necessary to establish the validity of this supposed variety.

[The birds met with by Mr. Goss were apparently *P. violaceus resplendens*. My reference of *Graculus bairdi* Gruber to *P. resplendens* Aud. is based on an actual comparison of the type specimen of the latter with typical examples of the former, from the Farallone Islands. They are identical, except that the type of *resplendens* has no flank-patches; but, as Mr. Goss observes, this is purely a seasonal character, said white patches being present only in the breeding season. The true *P. violaceus* is a much more northern bird than *resplendens*, and differs chiefly, if not only, in its larger size. Its distribution extends from Kamtschatka through the Aleutian chain, and thence south along the coast of Alaska for an undetermined distance, but it probably does not occur on the coast of Washington Territory or Oregon, except in winter.—ROBERT RIDGWAY.]

a BRIEF DIAGNOSES OF TWO NEW RACES OF
NORTH AMERICAN BIRDS.

BY E. W. NELSON.

1. *Picoides tridactylus alascensis*. ALASKAN THREE-TOED WOODPECKER.—SUBSP. CHAR.:—Differing from *P. tridactylus americanus* in having the back much more broadly barred with white, the white bars

* Proc. Acad. Nat. Sci. Phila., XVII, 1865, pp. 5, 6.